IN THE CLAIMS

PLEASE AMEND THE CLAIMS AS FOLLOWS:

1. (currently amended) A ~~server~~ system for maintaining session based communications ~~communicating~~ with a client, comprising:

    a ~~first~~ primary server for communicating with the client ~~one or more clients~~, the primary ~~first~~ server employing a cache memory containing state information for a session[[s]] between the ~~first~~ primary server and the ~~one or more~~ client[[s]]; and

    a plurality of secondary servers ~~second server~~ employing ~~a second~~ cache memory containing a copy of a portion of the state information for the session between the primary server and the client, the portion of the state information received from the ~~first~~ primary server, wherein the client may establish a new session with any one the servers from the plurality of secondary servers if the session between the primary server and the client terminates, and wherein the server from the plurality of secondary servers having established a new session with the client may request a necessary portion of state information from another server from the plurality of secondary servers if the necessary portion of the state information is not present at the server from the plurality of secondary servers having established a new session with the client, the plurality of secondary servers collectively maintaining a complete copy of the state information.

2. (currently amended) The ~~server~~ system of ~~recited in~~ claim 1, wherein the state information is credential information.

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3. (currently amended) The ~~server~~ system of ~~recited in~~ claim 2, wherein the credential information includes a Secure Sockets Layer session identifier.

4. (currently amended) The ~~server~~ system of ~~recited in~~ claim 3, wherein the credential information also includes Secure Sockets Layer session information.

5. (currently amended) The ~~server~~ system of ~~recited in~~ claim 3, wherein the credential information also includes authentication information ~~for users of the one or more clients~~.

6. (currently amended) The ~~server~~ system of ~~recited in~~ claim 2, wherein the credential information also includes authentication information ~~for users of the one or more clients~~.

7. (currently amended) The ~~server~~ system of ~~recited in~~ claim 1, wherein the state information is data segment information for controlling the transmission of a data segment between the ~~first~~ primary server ~~device~~ and the ~~one or more~~ client ~~devices~~.

8. (currently amended) The ~~server~~ system of ~~recited in~~ claim 1, wherein the state information is Transmission Control Protocol/Internet Protocol header information.

9. (currently amended) The ~~server~~ system of ~~recited in~~ claim 1, wherein the state information is purchase information.

10. (currently amended) The ~~server~~ system of ~~recited in~~ claim 9, wherein the purchase information is items selected for purchase by a user[[s]] of the ~~one or more~~ client[[s]].

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11. (currently amended) The ~~server~~ system of ~~recited in~~ claim 9, wherein the purchase information is financial transaction information for a user[[s]] of the ~~one or more~~ client[[s]].

12. (currently amended) The ~~server~~ system of ~~recited in~~ claim 9, wherein the purchase information is billing addresses information ~~of users of the one or more clients~~.

13.-15. (cancelled)

16. (currently amended) The ~~server~~ system of ~~recited in~~ claim 1, wherein the state information is stored in ~~the first~~ cache memory ~~and the second cache memory~~ using a hash table.

17. (currently amended) The ~~server~~ system of ~~recited in~~ claim 16, wherein the state information is stored in ~~the first~~ cache memory ~~and the second cache memory~~ using the BUZhash algorithm.

18. (currently amended) The ~~server~~ system of ~~recited in~~ claim 1, wherein the ~~first~~ primary server ~~device~~ transmits the state information to the plurality of secondary servers ~~second server device~~ using multicast communication.

19. (currently amended) The ~~server~~ system of ~~recited in~~ claim 18, wherein the ~~first~~ primary server transmits the state information to the plurality of secondary servers ~~second server~~ using negative acknowledgement multicast communication.

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20. (withdrawn) A server system for communicating with clients, comprising:

a first server for communicating with one or more clients, the first server
employing a first cache memory storing a first portion of a cache
containing state information for sessions with one or more clients; and

a second server employing a second cache memory with a second portion of the
cache containing the state information for sessions with the one or more
clients.

21. (withdrawn) The server system for communicating with clients according to claim
20, wherein at least some of the state information in the first portion of the cache is for
at least one session with at least one of the one or more clients, and at least some of the
state information stored in the second portion of the cache is the same as the at least
some of the state information stored in the first portion of the cache, such that both the
first server and the second server can communicate with at least one of the one or more
clients using at least some of the state information.

22. (withdrawn) The server system for communicating with clients according to claim
21, wherein the first portion of the cache stored in the first cache memory is the same as
the second portion of the cache stored in the second cache memory, such that both the
first server device and the second server device can communicate with any of the one or
more clients using the state information.

23. (withdrawn) The server system for communicating with clients according to claim
20, further including a third server employing a third cache memory storing a third
portion of the cache that includes both the first portion of the cache and the second
portion of the cache.

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24. (withdrawn) The server system for communicating with clients according to claim 23, further including a fourth server employing a fourth cache memory storing a fourth portion of the cache that includes the third portion of the cache.

25. (withdrawn) The server system for communicating with clients according to claim 20, wherein the state information is stored in the first cache memory and the second cache memory using a hash table.

26. (withdrawn) The server system for communicating with clients according to claim 25, wherein the state information is stored in the first cache memory and the second cache memory using the BUZhash algorithm.

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27. (withdrawn) A method of communicating with a client, comprising:

    conducting a session with a client from a first server;

    obtaining state information corresponding to the session between the first server
        and the client;

    caching the state information with at least a second server; and

    resuming the session with the client from the second server using the cached
        state information.

28. (withdrawn) The method of communicating with a client according to claim 27,
further including:

    caching the state information with a third server, and

    obtaining the state information for caching with the second server from the third
        server.

29. (withdrawn) The method of communicating with a client according to claim 27,
wherein the state information is credential information.

30. (withdrawn) The method of communicating with a client according to claim 29,
wherein the credential information includes a Secure Sockets Layer session identifier.

31. (withdrawn) The method of communicating with a client according to claim 30,
wherein the credential information also includes Secure Sockets Layer session
information.

32. (withdrawn) The method of communicating with a client according to claim 30,
wherein the credential information also includes authentication information for users of
the one or more clients.

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33. (withdrawn) The method of communicating with a client according to claim 29, wherein the credential information also includes authentication information for users of the one or more clients.

34. (withdrawn) The method of communicating with a client according to claim 27, wherein the state information is data segment information for controlling the transmission of a data segment between the first server device and the one or more client devices.

35. (withdrawn) The method of communicating with a client according to claim 34, wherein the state information is Transmission Control Protocol/Internet Protocol header information.

36. (withdrawn) The method of communicating with a client according to claim 27, wherein the state information is purchase information.

37. (withdrawn) The method of communicating with a client according to claim 36, wherein the purchase information is items selected for purchase by users of the one or more clients.

38. (withdrawn) The method of communicating with a client according to claim 36, wherein the purchase information is financial transaction information for users of the one or more clients.

39. (withdrawn) The method of communicating with a client according to claim 36, wherein the purchase information is billing addresses of users of the one or more clients.

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40. (withdrawn) The method of communicating with a client according to claim 27, further including caching the state information at a plurality of servers, such that any of the plurality of servers may resume the session with the client using the state information.

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41. (withdrawn) A method of sharing state information among a plurality of server computers, comprising:

> initiating, from a first server computer, a communication session with a client computer;
>
> storing, at the first server computer, state information reflecting the communication session between the first server computer and a client computer; and
>
> transmitting the state information from the first server computer to a second server computer, so that the second server computer can resume the communication session with the client computer using the state information.

42. (withdrawn) The method of sharing state information recited in claim 41, further including transmitting the state information from the first server computer to a third server computer, so that the third server computer can enter into a communication session with the client computer using the state information

43. (withdrawn) The method of sharing state information recited in claim 42, wherein the state information is transmitted from the first server computer to the second server computer and the third server computer simultaneously.

44. (withdrawn) The method of sharing state information recited in claim 43, wherein the state information is transmitted from the first server computer to the second server computer and the third server computer using a multicast transmission.

45. (withdrawn) The method of sharing state information recited in claim 44, wherein the multicast transmission is a positive acknowledgement multicast transmission.

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46. (withdrawn) The method of sharing state information recited in claim 44, wherein the multicast transmission is a negative acknowledgement multicast transmission.

47. (withdrawn) The method of sharing state information recited in claim 41, wherein the state information is credential information.

48. (withdrawn) The method of sharing state information recited in claim 47, wherein the credential information includes a Secure Socket Layer session identifier.

49. (withdrawn) The method of sharing state information recited in claim 48, wherein the credential information further includes Secure Sockets Layer session information.

50. (withdrawn) The method of sharing state information recited in claim 47, wherein the state information includes authentication information for a user of the client computer.

51. (withdrawn) The method of sharing state information recited in claim 41, wherein the state information is data segment information for controlling transmission of a data segment between the first server computer and the client computer.

52. (withdrawn) The method of sharing state information recited in claim 51, wherein the state information is Transmission Control Protocol/Internet Protocol header information.

53. (withdrawn) The method of sharing state information recited in claim 41, wherein the state information is purchase information for a purchase transaction communicated between the first server computer and the client computer.

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54. (withdrawn) The method of sharing state information recited in claim 53, wherein the purchase information identifies a purchase item selected for purchase by a user of the client computer.

55. (withdrawn) The method of sharing state information recited in claim 53, wherein the purchase information includes financial transaction information for a user of the client computer.

56. (withdrawn) The method of sharing state information recited in claim 53, wherein the purchase information includes a billing address of a user of the client computer.

57. (withdrawn) The method of sharing state information recited in claim 41, further including storing the state information at the first server computer in a cache memory.

58. (withdrawn) The method of sharing state information recited in claim 57, wherein the state information is stored in the cache memory according to a hash table.

59. (withdrawn) The method of sharing state information recited in claim 58, wherein the state information is stored in the cache memory using a BUZhash algorithm.

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60. (withdrawn) A method of sharing state information among a plurality of server computers, comprising:

    receiving first state information from a first server computer, the first state information reflecting a first communication session between the first server computer and a first client computer;

    storing the first state information;

    receiving second state information from a second server computer, the second state information reflecting a second communication session between the second server computer and a second client computer;

    storing the second state information;

    receiving a request for the first state information from a third server computer; and

    transmitting the first state information to the third server computer, such that the third server computer can employ the first state information to reestablish the first communication session with the first client computer.

61. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 60, further comprising:

    receiving a request for the second state information from a fourth server computer; and

    transmitting the second state information to the fourth server computer, such that the fourth server computer can employ the second state information to reestablish the second communication session with the second client computer.

62. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 60, wherein the first state information is credential information.

63. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 62, wherein the credential information includes a Secure Sockets Layer session identifier.

64. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 63, wherein the credential information further includes Secure Sockets Layer session information.

65. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 62, wherein the credential information includes authentication information for a user of the first client computer.

66. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 60, wherein the first state information is data segment information for controlling transmission of a data segment between the first server computer and the first client computer.

67. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 66, wherein the first state information is Transmission Control Protocol/Internet Protocol header information.

68. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 60, wherein the first state information is purchase information for a purchase transaction communicated between the first server computer and the first client computer.

69. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 68, wherein the purchase information identifies a purchase item selected for purchase by a user of the first client computer.

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70. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 68, wherein the purchase information includes financial transaction information for a user of the first client computer.

71. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 68, wherein the purchase information includes a billing address of a user of the client computer.

72. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 60, further including storing the first state information and the second state information in a cache memory.

73. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 72, wherein the first state information and the second state information are stored in the cache memory according to a hash table.

74. (withdrawn) The method of sharing state information among a plurality of server computers recited in claim 73, wherein the first state information and the second state information are stored in the cache memory using a BUZhash algorithm.

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75. (withdrawn) A computer network, comprising:

> a plurality of server computers, each server computer employing state
>> information reflecting a communication session with an associated client
>> computer;

> a cache repository for storing a cache containing the state information for each of
>> the plurality of server computers; and

> a plurality of cache memories, each cache memory being associated with one of
>> the plurality of server computers and storing only a portion of the cache
>> stored in the cache repository.

76. (withdrawn) The computer network recited in claim 75, wherein the state
information is credential information.

77. (withdrawn) The computer network recited in claim 75, wherein the credential
information includes Secure Sockets Layer session identifiers identifying a
communication session between at least one of the plurality of servers and a client
computer.

78. (withdrawn) The computer network recited in claim 77, wherein the credential
information further includes Secure Sockets Layer session information.

79. (withdrawn) The computer network recited in claim 77, wherein the credential
information includes authentication information for a user of the client computer.

80. (withdrawn) The computer network recited in claim 75, wherein the state
information is data segment information for controlling transmission of a data segment
between at least one of the plurality of server computers and a client computer.

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81. (withdrawn) The computer network recited in claim 80, wherein the state information is Transmission Control Protocol/Internet Protocol header information.

82. (withdrawn) The computer network recited in claim 75, wherein the state information is purchase information for a purchase transaction communicated between at least one of the plurality of server computers and a client computer.

83. (withdrawn) The computer network recited in claim 82, wherein the purchase information identifies a purchase item selected for purchase by a user of the client computer.

84. (withdrawn) The computer network recited in claim 82, wherein the purchase information includes financial transaction information for a user of the client computer.

85. (withdrawn) The computer network recited in claim 82, wherein the purchase information includes a billing address of a user of the client computer.

86. (withdrawn) The computer network recited in claim 75, wherein the state information is stored in the cache repository according to a hash table.

87. (withdrawn) The computer network recited in claim 86, wherein the state information is stored in the cache repository using a BUZhash algorithm.

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